

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-7, 9, 10, 12-15, 17, and 18 are currently pending. Claims 1, 5, 9, 10, 12, 17, and 18 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1, 7, 9, 10, 12-15, 17, and 18 were objected to as containing an informality; Claims 1-7, 9, 10, 12-15, 17, and 18 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite regarding the “independent” limitation recited in those claims; Claims 1, 5, 9, 10, 12, 17, and 18 were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,378,887 to Kobayashi (hereinafter “the ‘887 patent”); Claims 2, 3, and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘887 patent in view of U.S. Patent Application Publication No. 2002/0188852 to Masaki et al. (hereinafter “the ‘852 application”); Claims 6, 7, 13, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘887 patent, further in view of U.S. Patent No. 6,351,845 to Hinker et al. (hereinafter “the ‘845 patent”); and Claim 4 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form and the rejection under 35 U.S.C. § 112, second paragraph, is overcome.

Applicant respectfully submits that the objections to the claims are rendered moot by the present amendment to the claims. The claims have been amended to clarify that the abbreviation IC stands for integrated circuit. Accordingly, the objections are believed to have been overcome.

Applicant respectfully submits that the rejections of the claims under 35 U.S.C. § 112, second paragraph, are rendered moot by the present amendment to the claims. Claim 1 has

been amended to clarify that the memory, the memory control unit, and the antenna of the non-contact type IC are separate and distinct elements from the communicating means, the detecting means, the determining means, and the access controlling means of the information processing apparatus. Applicant respectfully submits that this is consistent with the claim limitation that the information processing apparatus has embedded therein a non-contact type integrated circuit. The non-contact type integrated circuit that is embedded in the information processing apparatus has a memory, a memory control unit, and an antenna. As separate and distinct elements, the information processing apparatus has a communicating means, detecting means, determining means, and access controlling means. The other independent claims have been amended in an analogous manner. Accordingly, Applicant respectfully submits that the claims satisfy 35 U.S.C. § 112.

Amended Claim 1 is directed to an information processing apparatus having embedded therein a non-contact type integrated circuit (IC), the information processing apparatus comprising: (1) communicating means for communicating data with the non-contact type IC via data lines, the non-contact type IC including a memory, a memory control unit, and an antenna; (2) detecting means for detecting any access to the non-contact type IC the detecting means being external to said non-contact type IC; (3) determining means for determining whether a result of detection by the detecting means indicates internal access by the communicating means of the information processing apparatus via the data lines or external access from an external apparatus via the antenna according to a change of electromagnetic field strength detected by the antenna; and (4) access controlling means for controlling the external access from the external apparatus via the antenna when the determining means determines that the result of detection by the detecting means indicates the external access from the external apparatus via the antenna. Further, Claim 1 has been amended to clarify that the memory, memory control unit, and antenna of the non-contact

type IC are separate and distinct elements from the communicating means, detecting means, the determining means, and the access controlling means of the information processing apparatus. The changes to Claim 1 are supported by the originally filed specification and do not add new matter.¹

Applicant respectfully submits that the rejection of Claim 1 (and all similarly rejected dependent claims) is rendered moot by the present amendment to Claim 1.

The '887 patent is directed to a non-contact type IC card that communicates signals with an external device in a non-contact manner, including a main circuit 16 that conducts various operations based on functions of the IC card, a circuit for setting time for inhibition of re-access 12 which creates a signal to inhibit operation of the main circuit for a predetermined period of time, and a control means for controlling the main circuit. Further, the '887 patent discloses that the main circuit 16 is inhibited for a predetermined period of time after the operation of the main circuit is completed to prevent a double write operation of history in the IC card due to re-access in a short period of time following an initial access. As shown in Figure 5, the '887 patent discloses an IC card having a memory 32 having two memory areas 321 and 322, a memory control section 36, a read area deciding section 34, and a modulating and demodulating section 38. The '887 patent discloses that *the read area deciding section 34 determines from which one of the two areas 321 and 322 of the memory data is to be read.* Further, the '887 patent discloses that the memory control section 36 controls writing to and reading from the memory 32, wherein the memory control section writes to or reads from either area 321 or area 322 based on information provided by the read area deciding section 34. See Figure 10 and the discussion related thereto in the '887 patent. Thus, the purpose of the '887 patent non-contact IC card shown in Figure 5 is to prevent

¹ See, e.g., Figure 2 and the discussion related thereto in the specification.

erroneous history information from being written into the memory 32 when a user of the card enters an area accessible to a reader/writer two or more times in quick succession.

However, Applicant respectfully submits that the '887 patent fails disclose determining means for determining whether a result of detection by the detecting means indicates internal access by the communicating means of the information processing apparatus via the data lines or external access from an external apparatus via the antenna according to a change of electromagnetic field strength detected by the antenna, as recited in amended Claim 1. The '887 patent does not disclose that the change of electromagnetic field strength detected by the antenna is used to determine whether a result of the detection by the detecting means indicates internal access or external access. In this regard, Applicant notes that page 6 of the outstanding Office Action states that "access can occur from a write operation via the external device" and "additionally, the access could simply result from reading the memory via the read error deciding section ...". However, Applicant notes that Claim 1 recites detecting means for detecting any access to the non-contact type IC. Applicant notes that "reading the memory via the read area deciding section" is not detecting access to the non-contact type IC. Rather, *the memory control section 36, the read area deciding section 34, and the memory 32 are part of the IC card disclosed by the '887 patent*. Accordingly, it is unclear to Applicant how the '887 patent can disclose a means, that is external to the non-contact type IC, for detecting access to the IC card by noting that one internal component of the IC card communication with another internal component of the IC card. Moreover, as discussed in more detail below, the internal access recited in Claim 1 is by the communicating means, which is an element of the information processing apparatus that is separate and distinct from the memory, memory control unit, and the antenna of the non-contact type IC, as recited in amended Claim 1.

Regarding the elements recited in amended Claim 1, the Office Action relies on the IC card 30 as shown in Figure 5 as reading on the claimed information processing apparatus, as set forth on the next to last and last lines of page 4 of the outstanding Office Action. Further, the Office Action relies on elements 32, 36, 38, and 40 of the IC card shown in Figure 5 of the '887 patent as reading on the embedded non-contact type IC recited in Claim 1. Further, Applicant notes that the Office Action relies on the memory control section 36 within the IC card 30 of the '887 patent as reading on the claimed detecting means, which is part of the claimed information processing apparatus. Further, the Office Action appears to rely on the modulation and demodulating section 38 and the memory control section 36 as reading on the claimed determining means, and also relies on the memory control section as reading on the determining means.

However, Applicant notes that, as recited in amended Claim 1, the information processing apparatus includes a communicating means, a detecting means, a determining means, an access controlling means. Further, the information processing apparatus has embedded therein a non-contact type IC, which includes a memory, a memory control unit and an antenna. Further, Claim 1 has been amended to clarify that the memory, memory control unit, and antenna of the non-contact type IC are separate and distinct elements from the communicating means, the detecting means, the determining means, and access controlling means of the information processing apparatus. Applicant notes that this limitation is supported by the specification at least in Figure 2 and the discussion related thereto in the specification. Thus, Applicant notes that the Office Action is relying on elements within the IC card 30 shown in Figure 5 to read on both the non-contact type IC recited in the claims and on the elements of the information processing apparatus, which Claim 1 clearly states are separate and distinct. Thus, it is unclear to Applicant how the memory control section 36 can at the same time be part of the claimed non-contact type IC

and the claimed information processing apparatus, wherein Claim 1 clearly states that the memory, memory control unit, and antenna of the non-contact type IC are separate and distinct elements from the communicating means, the detecting means, the determining means, and the access controlling means of the information processing apparatus. Applicant respectfully submits that it cannot, and thus respectfully submits that the '887 patent fails to disclose the detecting means recited in Claim 1.

Further, Applicant notes that the Office Action insists on asserting that "... the memory control section is capable of making a determination of where the access is coming from – more specifically, the read area deciding section is used to decide which area the memory 32 should be accessed."² However, Applicant notes that the read area deciding section is only involved in the writing and reading of information to the memory 32. Applicant respectfully submits that the '887 patent does not disclose that the memory control section makes a determination of whether the access is internal via the data lines or external to the IC card 30 via the antenna. While Applicant agrees that the memory control section is "involved" in having information written to and read from the memory 32, the '887 patent does not disclose that the memory control section makes the determination recited in Claim 1. In essence, the Office Action is arguing that there exists some type of internal access to the memory and some type of external access to the memory. Even assuming *arguendo* that both types of access are disclosed by the '887 patent, which they are not, this is not the same as a disclosure that an element disclosed by the '887 patent determines whether a result of detection by a detecting means indicates internal access via data lines or external access from an external apparatus via the antenna according to a change of electromagnetic field strength detected by the antenna. The claims require that when there is a detection of an access, it is determined whether the detection indicates an internal access or external access. ***No unit in***

² See page 6 of the outstanding Office Action.

the '887 patent makes the determination as to whether a particular access is internal or external.

In the outstanding Office Action the Examiner appears to dismiss this argument by merely stating that "it appears that the Examiner and Applicant fundamentally disagree on the interpretation of Kobayashi's teachings." However, Applicant respectfully submits that the Office Action is misinterpreting the role of the read area deciding section and is using the same type of access to read on both the claimed internal access and external access. The read area deciding section 34 tells the memory control section which area to read from, but this is all predicated on **external** access. The Office Action is attempting to turn a disclosure of an external access into both an internal access and an external access, since the memory control section is responsible for the external access. However, Applicant notes that Claim 1 requires that the internal access be by the communicating means of the information processing apparatus, which is a separate and distinct unit from the memory, memory control unit, and antenna of the non-contact type IC.

In this regard, Applicant notes that page 15 of the outstanding Office Action states that "essentially, the Examiner maintains that the memory control section must inherently 'determine' if the data is coming from the read area deciding section or externally (via the antenna for example), else would fail to execute its intended function." Applicant respectfully disagrees. ***The data to be written into the memory does not come from the read area deciding section.*** The read area deciding section 34 merely sends a signal to the memory control section 36 to indicate which area the memory data should be read from or written to. Moreover, Applicant notes that this function occurs when the access comes from the antenna 40. There is no separate internal access disclosed by the '887 patent. All access is external in the '887 patent.

Moreover, as discussed above, the analogy of the elements recited in the '887 patent to those in the claims is nonsensical since, as the amendment to Claim 1 makes clear, the memory, memory control unit, antenna of the non-contact IC are separate and distinct elements from the communicating means, the detecting means, the determining means, and the access controlling means of the information processing apparatus.

For the reasons stated above, Applicant respectfully submits that amended Claim 1 patentably defines over the '887 patent.

Independent Claim 9 is directed to an information processing method performed by an information processing apparatus having embedded therein a non-contact type IC, the method including a determining step for determining, by a signal judging unit of the information processing apparatus that is external to the non-contact type IC, whether result or detection by processing of the detecting step indicates internal access via the data lines by processing of the communicating step or external access from an external apparatus via the antenna according to a change of electromagnetic field strength detected by the antenna. Independent Claim 10 recites a similar step. Further, independent Claim 10 recites determining means for determining whether result of detection by the detecting means indicates internal access by the communication means of the information processing apparatus or external access from the external apparatus via the antenna according to a change of electromagnetic field strength detected by the antenna. Claims 17 and 18 recite a determining step similar to that recited in Claims 9 and 10. Accordingly, for the reasons stated above, Applicant respectfully submits that the rejections of independent Claims 9, 10, 12, 17, 18 are rendered moot by the present amendment to those claims.

Regarding the rejection of Claims 2, 3, 6, 7, and 13-15 under 35 U.S.C. § 103, Applicant respectfully submits that the '852 application and the '845 patent fail to remedy the deficiencies of the '887 patent, as discussed above. Accordingly, Applicant respectfully

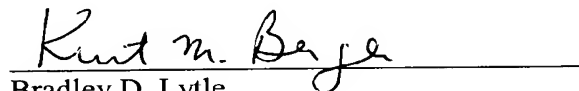
submits that the rejection of the above-noted dependent claims is rendered moot by the present amendment to Claims 1 and 9.

Thus, it is respectfully submitted that independent Claims 1, 9, 10, 12, 17, and 18 (and all associated dependent claims) patentably define over any proper combination of the '887 patent, the '852 application, and the '845 patent.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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